



ORIGINAL RESEARCH



Communication skills among Ardabil Medical University students and its association with demographic characteristics

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ABSTRACT

Background: Communication skills (CS) are one of the elements of generic skills that are essential among university students. CS are referred to as hearing and speech relation between people and its feedback. Medical students as the main members of the medical personal need to acquire CS in order to communicate effectively and purposefully with patients. The weakness of communication between the medical staff can lead to medical mistakes and reduce the patient's quality of care. So, the aim of this study was to determine the level of CS among Ardabil Medical University students and its association with demographic characteristics.

Methods: This descriptive–analytical study was conducted on 250 medical students who were randomly selected from Ardabil Medical University students in 2018. The data collection tool was a questionnaire that included demographic data and interpersonal CS test (34 items) with a range of 34–170. Data analysis was done using statistical methods in Statistical Package for the Social Sciences version 21.

Results: Of all students, 62.3% were girls and the rest were boys. The average age of students was 23.7 ± 2.3 years. Of students, 54.7% had moderate CS and the others had high levels of CS. The average score of student CS was 98 ± 14 and there was a significant relationship between gender and CS levels. Of students, 36.7% also had a history of participation in individual skills workshops.

Conclusion: The results indicated that students' CS were in moderate and girl students had a higher level of CS than boys.

ARTICLE HISTORY

Received May 29, 2019

Accepted October 01, 2019

Published October 24, 2019

KEYWORDS

Communication skill;
students; Ardabil

Introduction

Communication skills (CS) mean a relation between two persons which take place by listening and speaking and its feedback could have an important role in the treatment, prognosis of diseases, and increasing the patient satisfaction [1].

Communication is a set of potential and actual abilities that allow for acceptable and informed behavior to reach a level of emotional relationship. CS are divided into three categories of cognitive, content, and process skills in which the content and process skills are interpersonal and process skills

are the skills that are used in educational programs [2]. The World Health Organization has also divided CS into two basic and advanced groups and to consider interpersonal CS in the basic CS group [3].

Regardless of students' academic knowledge, having CS could be an important factor for the follow-up of patient's problem. In addition to students' academic knowledge, having Communication skills among students could be an important factor to track patients' problems. Also, by CS success, we could have the outcome such as better diagnosis of disease, decreasing medical errors, improving the

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course of the disease, and patient and physician satisfaction [4].

The level of CS about the treatment and prognosis of diseases and hearing the patient questions and answer them among medical university students were at low level [5].

Recognizing the strengths and weaknesses of CS among medical university students could be important for promoting quality of care and to increase the patient satisfaction and reduce the treatment costs in the future. Identifying strengths and weaknesses of communication skills among students to improve quality of life and patient satisfaction and also reducing treatment costs is essential in the future. So having effective and targeted communication with the medical staff and patients will improve their performance and promote educational and therapeutic goals [6].

Although CS training has begun since the 1980s, it is still not being taken seriously by medical students in most universities [7].

Recently, many studies about CS among students in various samples showed that most of the students have CS at moderate level [6,8,9].

Due to lack of more studies about CS among medical university students and also due to the importance of CS for these students, the aim of this study was to determine the level of CS among Ardabil Medical University students and its association with demographic characteristics.

Method

This cross-sectional study has been done on 250 students with different disciplines, such as Medical Doctoral, Nursing, Paramedical fields, and health, who were randomly selected from Ardabil Medical University students at the year 2018. All patients after getting oral consent completed the questionnaire. Data were collected through a two-part questionnaire: the first part containing demographic information such as gender, age, marital status, educational level, total grade, place of residence, parental education, and history of participation in the CS workshop and the second part is the Queendom standard questionnaire which includes Interpersonal CS test in which its reliability and validity were checked before in more studies. The Queendom questionnaire consists of 34 items of five options and its score ranged from 34 to 170. Options for each item defined as almost never, rarely, sometimes, most often, and rather always with score 1–5.

The CS levels were divided into three groups: low (34–79), moderate (80–125), and high (>125)

Statistical analysis

Data were analyzed by using statistical methods in SPSS version 21. *T*-test, Pearson correlation coefficient, and one-way analysis of variance were used to determine the association between variables and the level of CS. *p*-value less than 0.05 was considered as significant.

Results

Of all students, 62.3% were girls and the rest were boys. The average age of students was 23.7 ± 2.3 and the age group 20–25 was with the highest frequency (78.7%). Of all students, 35.3% were native and 69.9% were single. The average student's adjusted was between 15 and 16 and 35.2% of them were in the first year of their university. 44.3% of students' parents had undergraduate (Table 1). 16.7% of students had a history of participation in CS workshops, which did not have a statistically significant relationship with the CS level score. Of students, 54.7% had moderate CS and the rest had high levels of CS. The average and high CS in women were 70.7% and 72.1%, respectively, which were statistically significant (Fig. 1). The mean of student CS was 98 ± 14

Table 1. Demographic data of all students.

Variables		<i>n</i>	%
Sex	F	156	62.3
	M	94	37.7
Age groups	20>	25	10
	25–20	197	78.7
	30–26	22	8.7
	30<	6	2.6
Residence place	Native	78	35.3
	Non-native	162	64.7
Marital status	Single	175	69.9
	Marriage	75	30.1
Parents education level	Undergraduate	87	34.9
	University degrees graduated	163	65.1
Years of entrance to university	1	88	35.2
	2	63	25.3
	3	34	13.4
	4 and more	65	26.1
Educational score	< 16	122	48.7
	16 and up	128	51.3

and there was a meaningful relationship with gender but its relation with age, place of residence, average, parental education, and marital status was no significant (Table 2). The results showed that among the five aspects of CS, the ability to receive and send messages and emotional control with 14 ± 27 and 26 ± 4 had the highest average, respectively (Table 3).

Discussion

It increases students' sensitivity to patients and changes their perception of patients as human

rather than physical [4]. Ineffective communications are considered a barrier in the healthcare system. In recent years, the emphasis has been done on CS training. In the present study, 36.7% of students had a history of participation in workshops, which did not have a significant relationship with student's CS scores. In the study of Salimi et al. [8], 15.9% of students had a history of participation in workshops which was less than our study results but no significant. In the study of Attari-Moghadam et al. [4], the results indicated that 3-day workshop

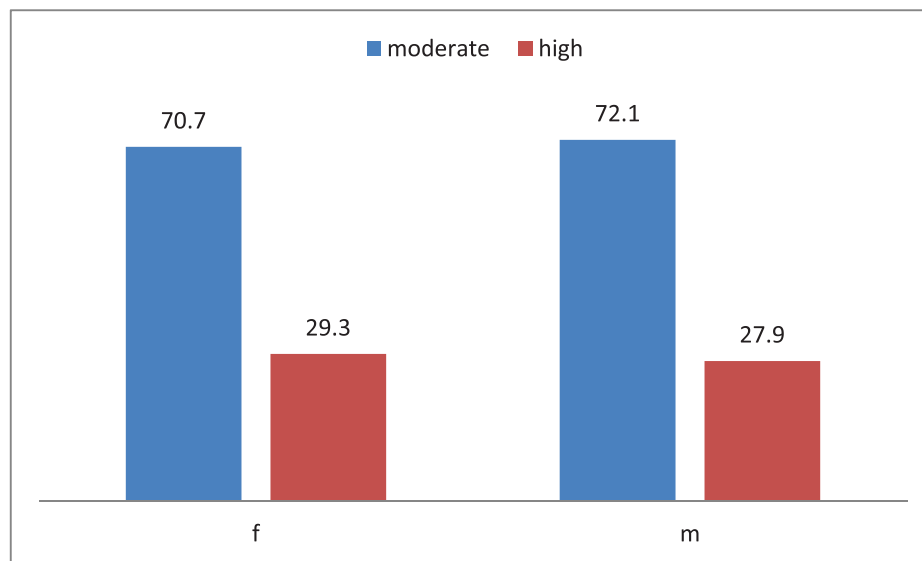


Figure 1. Frequency of communication skill among students by sex.

Table 2. Relation between the mean of communication skill and some of demographic variables.

Variables		Mean \pm SD	Mean diff	p-value
Sex	M	10.2 \pm 91.23	10.6	0.00
	F	10.4 \pm 102.64		
Native	Yes	12.7 \pm 103.03	1	0.66
	No	13.7 \pm 100.03		
Marital Status	Single	12.3 \pm 99.1	4.36	0.068
	Marriage	14.7 \pm 103.5		

Table 3. The mean score of five dimensions of communication skill among students.

Dimensions	Max	Min	Mean \pm SD
Ability to receive and send message	39	16	28 \pm 4.7
Emotional control	42	18	26.3 \pm 4.7
Audience skill	25	10	16.9 \pm 2.7
Idea about the communication skill	22	6	14.5 \pm 3.2
Relationship with decisiveness	23	6	14.8 \pm 3.4
Total	140	68	98 \pm 14

setup of CS between physician and patient significantly increased the knowledge of students about CS which was not in line with our study because in our study only 16.7% of students participated in the CS workshops and its relation with CS was not significant. In the study of Attari-Moghaddam et al. [4], the results indicated that doing 3-day workshop about CS between physician and patient significantly increased the attitude of students about CS. This results not confirmed in our study because in our study only 16.7% of students participated in the CS workshops and its relation with CS scores was not significant. The average score of CS among students in this study was 98 ± 14 which was lower than Salimi et al. [8] with an average of 99.22 ± 9.91 and higher than Barati et al. [10] study with 55.19 ± 1.3 . The results also showed that the average score of CS of female students was significantly higher than male students. In a study by Molaei et al. [6] on students of Ardabil University of medical sciences in

2009, it was also shown that the desired CS among female students were higher than those of male students which were in line with this study because in our study similar to Molaei et al. [6] study, the mean of CS in female students was significantly higher than male students.

In the study of Vahabi et al. [11] among Kurdistan Medical University students, the average CS of male students were higher than that of female students which was in the opposite direction of the present study.

In the study of Salimi [8] and Heidarzadeh et al. [12] contrary to the present study, there was no significant relationship between the CS and gender and it seems that the reason for these differences could be due to the social cultural and family circumstances in different regions. In this study, 54.7% of students had moderate skills and the rest were high which was similar to other studies [11–13].

In this study, the ability to receive and send messages and emotional control had the highest scores. Barati et al. [10] in their study showed that the CS level in students in all levels such as verbal, listening, and feedback was not in the desirable level that was not similar to our study because in this study we resulted that the CS among students was in moderate level.

The married people obtained score 14.7 ± 103.5 compared to single people with 99.1 ± 12.3 but not statistically significant. The result of this study was in line with Molaei et al. [6] study in Ardabil but not in line with Heidarzadeh et al. [12] and Salimi et al. [8] studies which they not found significant relation among marital status and CS.

CS level among students has been increased with Students' Grades increase but in this study, there was no significant relation between average and CS level. In the same study, Barati et al. [10] showed that all students had the highest score in hearing and verbal skills.

Conclusion

The results of this study showed that CS of most of the students were at a moderate level and female students had a higher level of CS than male. Since most of the internal studies also showed the level of average CS among students, strengthening CS by providing the necessary training has increased the ability and performance of the students and it is necessary that these training should begin at the start of the university entrance and continue in different educational periods. It is suggested that

teaching and training CS be included in the educational curriculum of students before entering to clinical courses.

Conflict of interest

None.

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